

## JOB SHEET 2-4-33 CHAINING USER FUNCTIONS

### INTRODUCTION

A User Function is limited to 31 commands for each User Function. You can opt to make the last command one which accesses another User Function. This is helpful for many purposes including extending work space for a User Function beyond 31 commands or having a User Function access itself to create a loop effect. Another option is chaining together User Functions. This allow one User Function to display products and calling (chaining) another User Function to manipulate the products. This way only one User Function needs to be defined to do all the manipulating of products.

### OBJECTIVE

Create a User Function that places maps in foreground on a 4-panel display and then chain it to another User Function.

### REFERENCE

NWS EHB 60531-1, USERS GUIDE: PUP/RPGOP, Section 11.0

### PROCEDURE

#### USER FUNCTION 5.

1. From the **User Function Menu**, type **D,5,MAPS\_FOREGRND/MAG8X\_4PNL\_LEFT** and press **RETURN**.
  - This User Function puts all maps in the foreground in a four panel display for the left screen.
2. At the command line, type **U,W,10** and press **RETURN**.
  - The wait command, the first line of this User Function, allows a little time for the User Function we are chaining to complete any steps not finished. This wait may need to be shorter if the chained User Function displays only a few background maps or longer if it displays several. Wait times can be up to 3600 seconds.

1

**USER FUNCTION MENU**

COMMAND: **U,D,5,MAPS\_FOREGRND/MAG8X\_4PNL\_LEFT**  
FEEDBACK:

Enter command.

(E)XECUTE, <UF#>,<rp>

(C)ANCEL EXECUTION

**(D)EFINE, <UF#>, <title>**

(E)ND DEFINE AND EXAMINE \*, (E)ND UF  
<UF#>, [User Function # to receive control]

(W)AIT, <SECONDS>

(E)XAMINE, (T)ITLES  
<UF#> \* [Examine and edit]

\*Note: Edit commands are available when the User Function Examine screen is displayed.

2

**USER FUNCTION MENU**

COMMAND: **U,W,10**  
FEEDBACK:

Enter command.

(E)XECUTE, <UF#>,<rp>

(C)ANCEL EXECUTION

(D)EFINE, <UF#>, <title>

(E)ND DEFINE AND EXAMINE \*, (E)ND UF  
<UF#>, [User Function # to receive control]

**(W)AIT, <SECONDS>**

(E)XAMINE, (T)ITLES  
<UF#> \* [Examine and edit]

\*Note: Edit commands are available when the User Function Examine screen is displayed.

At the Graphic Tablet with the **LEFT** puck button:

3. Select **AII QUADRANTS**.
4. Select **RECENTER/MAG 8X**.
  - This command centers on a storm of interest and magnifies it 8 times.
5. Select **ALL QUADRANTS**.
  - Remember the All Quadrants box always defaults to one quadrant mode after the command is executed.
6. Select **MAPS FOREGD/BACKGD**.

At the Applications Terminal:

7. Type the command line to read **U,EN,E** and press **RETURN**.
  - This ends User Function 5 and displays the contents of the User Function on the Applications Terminal screen.

## GRAPHIC TABLET

KEYBOARD														SYMBOLS														USER FUNCTIONS													
EDIT COMMANDS	EDIT ANNOT	EDIT ALERT AREA	DELETE ALERT BOX	ADD ALERT BOX	DEL RCTL	ADD RCTL	EDIT RCM PART A	EDIT RCM PART C	ST 25	ST 26	ST 27	ST 28	ST 29	ST 30	ST 31	ST 32	26	27	28	29	30																				
	EDIT MAP	HIGH DETAIL	1	2	3	4	5	6	7	8	9	0	*	BACK SPACE	51	52	53	54	55	56	21	22	23	24	25																
	START ERASE	END ERASE	Q	W	E	R	T	Y	U	I	O	P	-	RET	45	46	47	48	49	50	16	17	18	19	20																
	START LINE	END LINE	A	S	D	F	G	H	J	K	L	:	;	UPPER SHIFT	39	40	41	42	43	44	11	12	13	14	15																
	CANCEL EDIT	EDIT & SAVE	Z	X	C	V	B	N	M	.	>	?/	SPACE	LOWER SHIFT	33	34	35	36	37	38	6	7	8	9	10																
PARAMETERS	AZIMUTH SELECT																																								
	CROSS SECTION SELECT																																								
	RPG																																								
	TIME																																								
	DATE																																								
	REPEAT COUNT																																								
	END HOUR																																								
	SLICE/DURATION																																								
	CENTER AZIMUTH																																								
	CENTER RANGE																																								
STORM DIRECTION																																									
STORM SPEED																																									
CONTINUED INTERVAL																																									
ALLOW SWA																																									
MATCH PARALLEL METERS																																									
DEFAULT PARALLEL METERS																																									
ELEVATION UP	LOW PRIORITY	DISPLAY PRODUCT	BASE REF	COMP REF	COMP REF	ECHO TOPS	REF CROSS	ACK PRODUCT	DISPLAY QUEUED	PRODUCT OFF	MAPS OFF	MAPS OFF	MAPS OFF	MAPS OFF	MAPS OFF	MAPS OFF	2	3	4	5																					
ELEVATION DOWN	REQUEST MAPS	SEND REQ	BASE VEL	STM REL	STM REL	ECHO TOPS	REF CROSS	ACK PRODUCT	DISPLAY QUEUED	PRODUCT OFF	MAPS OFF	MAPS OFF	MAPS OFF	MAPS OFF	MAPS OFF	MAPS OFF	2	3	4	5																					
LOWEST ELEVATION	BLANK TIME DATE	SEND REQ	BASE VEL	STM REL	STM REL	ECHO TOPS	REF CROSS	ACK PRODUCT	DISPLAY QUEUED	PRODUCT OFF	MAPS OFF	MAPS OFF	MAPS OFF	MAPS OFF	MAPS OFF	MAPS OFF	2	3	4	5																					
DED ASSOC	13 NM	8 LEVEL	BASE SPECTRUM	COMBINED SHEAR	COMBINED SHEAR	COMBINED SHEAR	COMBINED SHEAR	COMBINED SHEAR	COMBINED SHEAR	COMBINED SHEAR	COMBINED SHEAR	COMBINED SHEAR	COMBINED SHEAR	COMBINED SHEAR	COMBINED SHEAR	COMBINED SHEAR	2	3	4	5																					
RPG 1	27 NM	16 LEVEL	ONE HOUR	THREE HOUR	THREE HOUR	STORM TOTAL	USER SELECTABLE	STORM TRACK	TORNADO VORTEX	RADAR CODED	ALL SWA	WARNING AREA	MIL OPN	POLAR GRID	LFM GRID	LFM GRID	2	3	4	5																					
RPG 2	54 NM	HIGH ALT	MESO	SEVERE WEATHER	SEVERE WEATHER	WEAK ECHO	VERTICALLY INTEGRATED	VELOCITY AZIMUTH	VELOCITY AZIMUTH	VELOCITY AZIMUTH	VELOCITY AZIMUTH	VELOCITY AZIMUTH	VELOCITY AZIMUTH	VELOCITY AZIMUTH	VELOCITY AZIMUTH	VELOCITY AZIMUTH	2	3	4	5																					
RPG 3	1.1 NM	MID ALT	M	LAYER COMP	LAYER COMP	LAYER COMP	LAYER COMP	LAYER COMP	LAYER COMP	LAYER COMP	LAYER COMP	LAYER COMP	LAYER COMP	LAYER COMP	LAYER COMP	LAYER COMP	2	3	4	5																					
RPG 3	2.2 NM	LOW ALT	LOW ALT	LAYER COMP	LAYER COMP	LAYER COMP	LAYER COMP	LAYER COMP	LAYER COMP	LAYER COMP	LAYER COMP	LAYER COMP	LAYER COMP	LAYER COMP	LAYER COMP	LAYER COMP	2	3	4	5																					
PARAMETERS														PRODUCTS														BACKGROUND MAPS													

## EXAMINE/EDIT USER FUNCTION

COMMAND: U,

FEEDBACK: **UF 5 DEFINITION COMPLETE**

EDIT CMDS: [EACH EDIT CMD MUST BE PRECEDED BY '(U)SER FUNCTION']

(DEL)ETE,<LINE#> (R)EPLACE END, [(E)ND OR <UF#>]

(I)NSERT,<LINE#> (REN)AME UF TITLE,<NEW TITLE>

1. U,W,10
2. ALL QUADRANTS L
3. RECENTER/MAGNIFY 8X L
4. ALL QUADRANTS L
5. MAPS FOREGROUND/BACKGROUND L
6. **U,EN,E**

## CHAINING USER FUNCTION 4 TO USER FUNCTION 5

Assume that we decide we always wanted our maps in foreground. We can either rewrite or edit User Function 4 or simply chain UF4 to UF5. In this example lets edit User Function 4 and chain it to User Function 5.

8. At the Main Menu, type **U** and press **RETURN**.
  - The User Function Menu displays.
9. Type **EXA,4** and press **RETURN**.
  - User Function 4 displays allowing you to either Examine or Edit it.
10. Type **REN,LOWEST\_FOUR\_REF\_LEFT\_54NM** and press **RETURN**.
  - The title for User Function 4 is renamed.
11. Type **DEL,5** and press **RETURN**.
  - This command deletes line 5 from User Function 4.
12. Repeat the command **DEL,5** until **U,EN,E** is on line 5 of the User Function.
13. Type **R,5** next to the "U" and press **RETURN**.
  - This (**R**)eplaces our **E**nd command with a command to go to UF5. Instead of User Function 4 ending it goes to User Function 5 and performs the actions listed. Note the feedback message.
14. At the Graphic Tablet, select a **BASE REF** product on either screen and select a point of interest.
15. To execute, at the Main Menu, type **U,E,4;** and press **RETURN**.
  - Note that the User Function displays, however this time the maps are placed in the foreground and magnified eight times due to User Function 5. Note that User Function 5 can be chained to any User Function requiring magnification and the map foreground/background toggled.
  - Remember once maps are put in either foreground or background, they remain in that position until the "MAPS FOREGD/BACKGD" box is selected or the PUP is rebooted. Once rebooted, the background maps default to being in the foreground. The display then stays that way until the "MAPS FOREGD/BACKGD" is again selected.

**END**

8  
9  
10  
11  
12  
13

EXAMINE/EDIT USER FUNCTION 4: LOWEST\_FOUR\_REF\_LEFT\_54NM

COMMAND: **U,**

FEEDBACK: **END COMMAND REPLACED**

EDIT CMDS: [EACH EDIT CMD MUST BE PRECEDED BY '(U)SER FUNCTION',]  
 (DEL)ETE,<LINE#> (R)EPLACE END, [(E)ND OR <UF#>]  
 (I)NSERT,<LINE#> (REN)AME UF TITLE,<NEW TITLE>

1. D,G,R L1
2. D,G,R L2
3. D,G,R L3
4. D,G,R L4
5. U,EN,5

15

## USER FUNCTION MENU

COMMAND: **U,E,4;**

FEEDBACK:

Enter command.

**(E)XECUTE, <UF#>,<rpg>**

(C)ANCEL EXECUTION

(D)EFINE, <UF#>, <title>

```
(E)ND DEFINE AND EXAMINE *, (E)ND UF
<UF#>, [User function # to receive control]
```

(W)AIT, &lt;SECONDS&gt;

(EXA)MINE, (T)ITLES  
<UF#> \* [Examine and edit]

\*Note: Edit commands are available when the User Function Examine screen is displayed.